



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/517,301

06/14/2005

Stefan Kern

P/63091

4485

156 7590 05/01/2008  
KIRSCHSTEIN, OTTINGER, ISRAEL  
& SCHIFFMILLER, P.C.  
489 FIFTH AVENUE  
NEW YORK, NY 10017

EXAMINER

JONES, STEPHEN E

ART UNIT

PAPER NUMBER

2817

MAIL DATE

DELIVERY MODE

05/01/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,301	<b>Applicant(s)</b> KERN, STEFAN	
	<b>Examiner</b> Stephen E. Jones	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 23 and 26-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23 and 26-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/14/08</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

The restriction requirement is deemed moot since all of the non-elected claims have been canceled.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe in view of Sweeney et al. (WO2002/012916A1) (both of record).

Watanabe teaches a microwave (i.e. RF) MMIC (e.g. see Fig. 11) including: Lange directional couplers (e.g. 10,20) and resistor terminations (e.g. 15, 25) for reflection elimination (e.g. see Col. 1, lines 57-63) (Claims 28, 30, 31); Fig. 11 also shows the port 11 is coplanar and inherently is connected to a line to allow an input/output signal (Claim 27); and the terminations 15 and 25 are arranged symmetrically with respect to the signal paths (Claim 32).

However, Watanabe does not explicitly teach that the terminations are removable or that the inductors are microstrips (Claims 23, 29), or that the circuit is a test circuit (Claim 26).

Sweeney provides the general teaching of removable resistive terminations on an MMIC (e.g. see page 11 lines 3-5 and 22-30).

It would have been considered obvious to one of ordinary skill in the art to have modified the Watanabe device to have formed the resistor terminations as removable such as suggested by Sweeney, because it would have provided the advantageous benefit of allowing for calibration signals to be fed thereto and thus testing of the device or other circuits, and One of ordinary skill in the art clearly would have found it obvious to have also formed the terminations of Watanabe as being removable because it merely would have been an art-recognized functionally equivalent/alternative termination means for an integrated circuit such as taught by Sweeney and the removable terminations could never be removed.

Also, as an obvious consequence of the device being the same structure as the presently claimed invention, obviously it can be used as part of a test device in the same manner as the present invention claims.

Furthermore, it would have been considered obvious to one of ordinary skill in the art to have formed the generic inductors of Watanabe as microstrips, because microstrips are a well-known art-recognized equivalent means for forming inductive transmission signal paths for microwave communications.

### ***Response to Arguments***

Applicant's arguments filed 1/14/08 have been fully considered but they are not persuasive.

Applicant argues that the teaching of removable terminations of Sweeney is not applicable to Watanabe because Sweeney is teaching that the terminations are for

introducing calibrations and there is no motivation to introduce calibrations to Watanabe.

This argument is not convincing. Sweeney teaches that terminations can be made to be removable on an MMIC. One of ordinary skill in the art clearly would have found it obvious to have also formed the terminations of Watanabe as being removable because it merely would have been an art-recognized equivalent/alternative termination means for an integrated circuit such as taught by Sweeney. Whether the device would function as it was intended after theoretically removing the termination is irrelevant since the claim merely recites that the termination is removable and does not indicate that the termination is not part of the final product structure. Also, anything can be considered removable whether it is intended to be removed or not.

Also Applicant requests a support citation for the Watanabe device being part of a test circuit.

Kormanyos is provided with this office action for the general well-known teaching that attenuators are used in test circuits (Col. 6 line 50-55). Clearly one of ordinary skill in the art would have found it obvious (and not hindsight) based on the teaching of Kormanyos that using attenuators in test circuits is well-known and the use of the Watanabe/Sweeney circuit for testing would have provided the advantageous benefit of variable tuning.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2817

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is (571)272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SEJ

/Stephen E. Jones/  
Primary Examiner, Art Unit 2817